



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,086	08/20/2004	Joe D. Dunlap JR.	RAP04 P-658A	5085
28101	7590	01/24/2006	EXAMINER	
VAN DYKE, GARDNER, LINN AND BURKHART, LLP 2851 CHARLEVOIX DRIVE, S.E. P.O. BOX 888695 GRAND RAPIDS, MI 49588-8695			TWEEL JR, JOHN ALEXANDER	
			ART UNIT	PAPER NUMBER
			2636	

DATE MAILED: 01/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/711,086	Applicant(s) DUNLAP, JOE D.	
	Examiner John A. Tweel, Jr.	Art Unit 2636	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6 and 8-10 is/are rejected.
- 7) ☒ Claim(s) 5, 7 and 11-14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 August 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 24, 30'. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 2636

3. Claims 1-4, 6, and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by **Garber et al** [U.S. 6,232,870].

For claim 1, the material support system for supporting items having RFID tags taught by **Garber** includes the following claimed subject matter, as noted, 1) the claimed at least one item support is met by the shelves seen in Figure 13 adapted to support a horizontal row of books, 2) the claimed RF antenna is met by the hand-held RFID device also seen in Figure 13 that contains an RFID reader, user interface, power source, antenna, processor, and software positioned adjacent the shelf, said device also 3) meeting the transport system, as the device can be transported along a horizontal row of books at the shelf.

For claim 2, Figure 13 of Garber shows a plurality of shelves adapted to support multiple horizontal rows of books and the RFID device can be transported along the multiple rows of items at the shelves.

For claim 3, the Garber reference mentions containing multiple RFID interrogation sources (readers) mounted in the device in order to rapidly process multiple items (Col. 13, Lns. 27-33).

For claim 4, the hand-held device of Garber may be transported both horizontally and vertically from one shelf to another.

For claim 6, the RFID device of Garber is adapted to be held in a space or "void" next to the shelf.

For claim 8, the system of Garber is designed for a retail system wherein items on shelves each have an RFID tag.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Garber** in view of **Brady et al** [U.S. 6,166,638].

For claim 9, the system of **Garber** includes the claimed subject matter as discussed in the rejection of claim 1 above. However, there is no mention of a warehouse material-handling system wherein the supports comprise a row of container supports adapted to support multiple-item containers.

The RFID transponder taught by **Brady** teaches a transponder having a particular dipole antenna and RF modulator. One application is in a warehouse having cargo containers or pallets as seen in Figures 7 and 8. A hand-held RFID interrogator (No. 82) is even used to check the condition of several transponders (Nos. 74-76). This reference is plain evidence that RFID systems have been in use in warehouses for some time.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the system of Garber for the tracking and inventory of warehouse items for the purpose of using a common and well known RFID application.

For claim 10, RFID systems are commonly used for automatic storage and retrieval systems. To use one in this fashion is not considered a patentable innovation, as this is merely one obvious use of RFID systems.

6. Claims 5, 7, and 11-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter:

As seen from the rejection above, it is not enough to merely state an antenna is "transported", as this has several different methods and results. However, the specific apparatus or method as to HOW the antenna is transported is considered unobvious, such as the two vertical supports, the monorail system, and the crane having a mast and gripper wherein the antenna is located on the mast or gripper.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Remahl [U.S. 5,260,694] is an article tracking system having a delivery zone transmitter.

Goff et al [U.S. 6,335,686] teaches antenna shelf tape for use with items having RFID tags.

Collins et al [U.S. 6,392,544] selectively activates RFID tags in close proximity.

Garber et al [U.S. 6,486,780] relates to RFID devices and handheld devices.

Swartzel et al [U.S. 6,552,663] includes a plurality of display tags with expanded functions.

Petrinovic [U.S. 6,927,692] calculates a quantity of items having RF tags.

Sawyer [U.S. 6,933,849] manages physical objects in environments such as police departments, law offices and courts.

Moore [U.S. 6,956,538] tracks passive RFID tags automatically.

Blum et al [U.S. 6,982,649] relates to a floor display system with interactive features.


9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John A. Tweel, Jr. whose telephone number is 571 272 2969. The examiner can normally be reached on M-F 10-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff Hofsass can be reached on 571 272 2981. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2636

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JAT
1/21/06

A handwritten signature in black ink, appearing to read 'J. Tweel', is positioned above the printed name and title.

JOHN TWEEL
PRIMARY EXAMINER